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09/823,429	03/30/2001	Sanjay K. Agrawal	CISCP539	9399
26541	7590	06/20/2006	EXAMINER	
Cindy S. Kaplan P.O. BOX 2448 SARATOGA, CA 95070			TANG, KAREN C	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/823,429	AGRAWAL, SANJAY K.	
	Examiner	Art Unit	
	Karen C. Tang	2151	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-9,11,14,18-20,22-25,27-29,31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-9,11,14,18-20,22-25,27-29,31 and 33-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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- This action is responsive to the amendment and remarks file on 3/28/06.
- Claims 1, 2, 4, 6-9, 11, 14, 18-20, 22-25, 27-29, 31, 33-41 are amended are for further examination, Claim 40, 41 are newly entered claims and are ready for examination.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 8, 9, 11, 14, 15, 18, 19, 20, 22, 23, 24, 25, 27, 28, 29, 31, and 37-41, are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. hereinafter Aoki (US 6,757,255) in view of Kumar et al hereinafter Kumar (US 6,657,987) in further view Sheno et al hereinafter Sheno (US 2002/0194343)

1. Referring Claims 1, 2, 23, and 24, Aoki discloses:

collecting traffic data at a queue of a router (refer to Col 1, Lines 35-45, Col 7, Lines 40-67 and Col 15, Lines 1-15), said queue associated with the traffic aggregate over a time interval (refer to Col 3, Lines 1-36);

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calculating a periodic delay for the traffic profile (refer to Col 12, Lines 1- 40 and Col 18, Lines 1-20).

Aoki discloses a traffic profile, (refer to Fig 10)

Aoki discloses an associated rate (refer to Col 2, Lines 25-55).

Aoki does not expressly disclose calculating a burst-rate based on traffic data collected at said queue.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

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Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar since the arts are analogous. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki and Kumar did not expressly indicate the packages that arrived at the destination comprising arrival time and size of packets.

Shenoi disclosed the packages that arrived at the destination comprising arrival time and size of packets (refer to 0011, 0034 and 0051-0054)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki, Kumar, and Shenoi, since the arts are analogous.

The suggestion/motivation would have been that by indicating the size of packages arriving at the presence buffer and measuring time delays provides cost effective manners to quantify the QoS thus, it can best utilize the transmission bandwidth in the network.

2. Refer to Claim 4, Aoki discloses wherein the associated rate is negotiated rate agreed to by a customer sending the traffic data (refer to Col 1, Lines 15-25 and Col 2, Lines 25-67).

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3. Referring to Claims 6 and 18, Aoki discloses wherein the periodic delay (delay is calculated by comparing periodically of inflow and outflow of the traffic within the queue, refer to Col 17, Lines 1-40) and allocated bandwidth associated with the queue (refer to Col 17, Lines 4-40, 54-68 and Col 18, Lines 1-20).

Aoki discloses an associated rate (refer to Col 2, Lines 25-55).

Aoki discloses a traffic profile (refer to Fig 10).

Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the

network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

4. Referring to Claim 7, Aoki discloses 7 wherein the queue is allotted a share of an output link capacity, said share exceeding the associated rate (refer to Col 1, Lines 35-45, Col 2, Lines 25-67, Col 15, Lines 60-68 and Col 16 Lines 1-12).

5. Referring to Claims 9, 25, and 31 Aoki discloses periodically collecting a rate parameter (effective bandwidth, refer to Col 8, Lines 45-55) and an associated with a queue for each of a plurality of routers (refer to Col 6, Lines 25-65, Col 15, Lines 1-15).

calculating a periodic delay (delay is calculated by comparing periodically of inflow and outflow of the traffic within the queue, refer to Col 17, Lines 1-40) associated with the rate (refer to Col 8, Lines 45-55) and for said each of a plurality of routers (refer to Col 6, Lines 25-68, Col 7, Lines 1-10, Col 12, Lines 1-40, Col 17, Lines 1-40, and Col 18, Lines 1-20).

Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

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Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses (traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

6. Referring to Claim 8, wherein the traffic aggregate is a class of traffic (Examiner interprets packet data is traffic aggregate, which is a class of traffic, refer to Col 6, Lines 64-68 and Col 7, Lines 1-10).



7. Referring to Claim 11, Aoki discloses

receiving packets at an input interface of a router (refer to Col 6, Lines 1-25, refer to Col 1, Lines 35-45, Col 7, Lines 40-67 and Col 15, Lines 1-15).

sending each packet to one of a plurality of streams responsive to a customer identification (refer to Col 1, Lines 15-25);

sending each packet in at least one of the plurality of streams to one of a plurality of queues responsive to a class field, each of said plurality of queues having an associated rate (bandwidth, refer to Col 2, Lines 25-67, and refer to Col 1, Lines 24-35 and Fig 16 and Col 17, Lines 1-50);

monitoring an arrival time and size of said each packet at the one of the queues during an interval time (refer to Col 6, Lines 25-67);

calculating a periodic delay for the traffic profile (refer to Col 12, Lines 1 –40 and Col 18, Lines 1-20).

Aoki discloses a traffic profile (refer to Fig 10).

Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

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Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses (traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

8. Referring to Claims 14, 15 and 20, Aoki discloses:

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a monitor that collects traffic data at a queue of a router (refer to Col 15, Lines 1-15), said queue associated with the traffic aggregate over a time interval (refer to Col 6, Lines 25-67, refer to Col 1, Lines 35-45, Col 7, Lines 40-67);

a processor (refer to Col 6, Lines 13-25. It is inherit that the computer must have processor to be able to run).

and a computer readable medium coupled to the processor and storing a computer program comprising:

code that causes the processor to receive the traffic data (refer to Col 6, Lines 25-67, Col 9, Lines 15-26);

code that causes the processor to calculate a burst parameter based on the traffic data collected at said queue (it is inherit that the computer must have processor to run the algorithm and communicate within the network via codes, refer to Col 6, Lines 5-67, and performance index/burst parameter which is associate with the rate of the packets transmitted via network, refer to Col 4, Lines 35-40 and network can be configured/code refer to Col 15, Lines 40-67);  
Aoki discloses a traffic profile (refer to Fig 10).

Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network

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delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses (traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki and Kumar did not expressly indicate the packages that arrived at the destination comprising arrival time and size of packets.

Shenoi disclosed the packages that arrived at the destination comprising arrival time and size of packets (refer to 0011, 0034 and 0051-0054)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki, Kumar, and Shenoi, since the arts are analogous.

The suggestion/motivation would have been that by indicating the size of packages arriving at the presence buffer and measuring time delays provides cost effective manners to quantify the QoS thus, it can best utilize the transmission bandwidth in the network.

9. Referring to Claims 19 and 22, Aoki discloses wherein the computer readable medium is a CD-ROM, floppy disk, flash memory, system memory hard drive, or data signal embodied in a carrier wave (refer to Col 9, Lines 15-26).

10. Referring to Claims 27, 28 and 29, Aoki discloses  
computer code that causes a processor to collect traffic data at the queue over a time interval, said traffic data having an associated negotiated (rate refer to Col 6, Lines 25-67);  
computer code that causes a processor to calculate a traffic profile responsive to the collected traffic data and the associated negotiated rate (refer to Col 2, Lines 25-55)  
computer code that causes a processor for the traffic profile and a allocated bandwidth associated with the queue (refer to Col 7, Lines 1-10);  
and a computer readable medium storing said computer code (refer to Col 9, Lines 15-26).

Aoki discloses a traffic profile (refer to Fig 10).

Aoki does not expressly disclose calculating a burst-rate.

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Kumar discloses calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses (traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67)

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki does not disclose calculating the worst-case delay.

Kumar discloses worst-case delay (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case

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delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

11. Referring to Claim 37, Aoki discloses wherein the associated rate is a maximum average bandwidth specified in a service level agreement (refer to Col 2, Lines 25-67).

12. Referring to Claim 38, Aoki discloses an associated rate (refer to Col 2, Lines 25-67).

Aoki does not expressly discuss a burst rate traffic profile comprises a y-intercept corresponding to the calculated burst parameter and a slope corresponding to the associated rate. Kumar discloses expressly discusses a burst rate traffic profile comprises a y-intercept corresponding to the calculated burst parameter and a slope corresponding to the associated rate (refer to Fig 2).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

13. Referring to Claim 39, Aoki does not expressly discloses calculating a cumulative bandwidth profile having a slope equal to allocated bandwidth.

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Kumar discloses calculating a cumulative bandwidth profile having a slope equal to allocated bandwidth (refer to Fig 2).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

14. Referring to Claim 40, Aoki does not discloses calculating error of data by comparing collected data to the burst rate traffic profile.

Kumar discloses calculating error of data by comparing collected data to the burst rate traffic profile (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

15. Referring to Claim 41, Aoki does not expressly discloses calculating a new burst parameter if the error is higher than a predetermined limit.



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Kumar discloses calculating a new burst parameter if the error is higher than a predetermined limit (refer to Col 5, Lines 40-67 and Col 2, Lines 30-67, Col 7 and 8).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to have combine Aoki and Kumar. The suggestion/motivation for doing so would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Claims 33, 34, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. hereinafter Aoki (US 6,757,255) in view of Kumar et al hereinafter Kumar (US 6,657,987) in further view of Sheno et al hereinafter Sheno (US 2002/0194343) and Tang et al. hereinafter Tang "Network Traffic Characterization Using Token Bucket Model".

16. Referring to Claim 33, Aoki does not expressly disclose calculating a burst-rate traffic profile.

Kumar discloses (traffic profile which deals with the burst rate, and associated rate, which forms a traffic profile, refer to Col 6, Lines 40-67 and Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but

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does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki nor Kumar nor Sheno did not expressly disclose utilizing a token bucket method.

Tang discloses use of token bucket method (refer to Abstract)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Aoki and Tang.

The suggestion/motivation for doing so would have been Aoki discloses the need to avoid the congestion algorithm is carried when observed the network (refer to Col 14, Lines 30-67 and Col 15, Lines 1-45), which is a form token bucket method is also an algorithm to avoid the traffic congestion method.

17. Referring to Claim 34, Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile.

Aoki nor Kumar do not expressly disclose utilizing a token bucket method.

Tang discloses use of token bucket method (refer to Abstract)

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At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Aoki and Tang.

The suggestion/motivation for doing so would have been Aoki discloses the need to avoid the congestion algorithm is carried when observed the network (refer to Col 14, Lines 30-67 and Col 15, Lines 1-45), which is a form token bucket method is also an algorithm to avoid the traffic congestion method.

18. Referring to Claim 35, Aoki discloses the associated rate (bandwidth, refer to Col 1, Lines 24-35. Col 2, Lines 25-67 and Fig 16 and Col 17, Lines 1-50)

Aoki nor Kumar do not expressly disclose utilizing a token bucket method.

Tang discloses use of token bucket method (refer to Abstract)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Aoki and Tang.

The suggestion/motivation for doing so would have been Aoki discloses the need to avoid the congestion algorithm is carried when observed the network (refer to Col 14, Lines 30-67 and Col 15, Lines 1-45), which is a form token bucket method is also an algorithm to avoid the traffic congestion method.

19. Referring to Claim 36, Aoki does not expressly disclose calculating a burst-rate.

Kumar discloses disclose calculating a burst-rate (refer to equation 1, Col 5, Lines 40-67).

At the time of the invention, it would have been obvious of ordinary skill in the art to combine Aoki and Kumar, since both inventions were about measuring the quality of communication. The

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suggestion/motivation would have been that Aoki has mentioned the delay in the system, but does not expressly mentioned the worse case delay. Pinging is designed to determine a network delay at that particular time. By running the network for period time frame, the profile that one gathered for the delay can determine the worst case delay for the traffic profile

Aoki nor Kumar do not expressly disclose utilizing a token bucket method.

Tang discloses use of token bucket method (refer to Abstract)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Aoki and Tang.

The suggestion/motivation for doing so would have been Aoki discloses the need to avoid the congestion algorithm is carried when observed the network (refer to Col 14, Lines 30-67 and Col 15, Lines 1-45), which is a form token bucket method is also an algorithm to avoid the traffic congestion method.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 4, 6-9, 11, 14, 18-20, 22-25, 27-29, 31, 33-41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ZARNI MAUNG**  
SUPERVISORY PATENT EXAMINER